

## PROCESS FOR TRANSFERRING A PHOTO IMAGE TO A MEDIUM

## BACKGROUND OF THE INVENTION

5 1. Field of the Invention

The present invention relates to a method or process of engraving materials using a laser. More particularly, the present invention relates to a process for transferring a photo image to a medium.

10 2. Description of the Prior Art

It is well known that lasers can develop sufficient power densities to vaporize certain materials. Lasers such as high-power carbon dioxide lasers can vaporize many materials such as wood, plastic and rubber, relatively efficiently. The use of the 15 laser offers the potential of producing very intricate engravings in a variety of materials. In addition, it is well known to employ laser technology to create personalized memorabilia such as for example, picture frames, mantle clocks, trophies, and/or collectable items.

20 However, notwithstanding the foregoing, manufacturers of these personalized/collectable articles are constantly seeking new ways to package, market and sale these somewhat conventional articles. Accordingly, there is a need to develop a process that allows a consumer to uniquely personalize an article by carving

or etching a personal photo image into at least a portion of the article thereby enhancing the overall allure of the article.

#### SUMMARY OF THE INVENTION

5        It is an object of the present invention to provide a process for enhancing the overall allure of a conventional article by carving or etching a personalized photo image into a portion of the article via electronic software and a computerized laser system.

10       It is another object of the present invention to provide a process for enhancing the overall allure of a wood article by carving or etching a personalized photo image into a portion of the article via electronic software and a computerized laser system.

15       It is another object of the present invention to provide a process for enhancing the overall allure of a wood picture frame by carving or etching a personalized photo image into a portion of the picture frame via electronic software and a computerized laser system.

20       It is another object of the present invention to provide such a process for enhancing the overall allure of a article by carving or etching a personalized photo image into a portion of the article via electronic software and a computerized laser system and that allows an individual to determine the portion of

the photo image to be etched onto the article.

These and other objects and advantages of the present invention are achieved by a process for transferring a photo image to an article by first converting a photo image into an 5 electronic format. The next step is to edit the photo image as needed using image editing software. After the photo image has been edited, if editing is needed, the photo image can then be converted into a format that is compatible with a computer aided laser system. Following the appropriate formatting of the photo 10 image, the photo image can then be modified via image editing software to produce a desired effect in the article. Finally, the photo image can be carved or etched into the article via the computer aided laser system. Thus, a process of the present invention can enhance the personal appeal and overall allure of 15 an article such as a wood frame.

#### BRIEF DESCRIPTION OF THE DRAWINGS

Other and further objects, advantages and features of the present invention will be understood by reference to the 20 following specification in conjunction with the accompanying drawings, in which like reference characters denote like elements of structure.

Fig. 1 is a schematic diagram reflecting a process in 25 accordance with an illustrative embodiment of the present

invention;

Fig. 2 is a flow diagram of the process in accordance with an illustrative embodiment of the present invention; and

Fig. 3 is an illustrative embodiment of a article enhanced 5 by in accordance with the process reflected in Fig. 1.

#### DETAILED DESCRIPTION OF THE INVENTION

Referring to the drawings and, in particular to Fig. 1, there is shown an illustrative embodiment of a process for 10 enhancing the personal appeal and/or overall allure of an article such as for example, a wood frame. The process generally represented by reference numeral 10.

Preferably, process 10 employs a computer aided laser system 20. Laser system 20 can preferably be of any known type suitable 15 for custom carving or etching a variety of different articles.

Process 10 preferably uses a first converter 40, such as for example a scanner, to convert a hard copy image 30 such as a photograph into a digital or an electronic format. Other means for converting a hard copy image 30 may also be used and are 20 within the scope of the present invention.

Process 10 preferably employs a first image editor 50. First image editor 50 can be any software that allows a user to adjust the contrast, brightness, intensity and/or any other of a

variety of visual effects in image 30. An example of such software is Corel Photo Paint™. Other software packages are readily available and may also be used in association with process 10. Preferably, first image editor 50 will enable a user 5 to isolate those portions of image 30 that are of interest. Also, first image editor 50 preferably is capable of converting image 30 into a grayscale image in the range of about 8-bits.

Process 10 preferably uses a second converter 60 to convert the grayscale of image 30 into a format that is compatible with 10 laser system 20. Second converter 60 can be any software suitable for formatting various images into a format consistent with that of laser system 20. For example, PhotoGrav™ is a software program capable of accomplishing this type of task in addition to others. It is noted that other currently available 15 software programs may also be used and are within the scope of the present invention.

Process 10 preferably also uses a second image editor 70 to enable a user to customize the outline or cut-line to follow the contour of the subject (e.g., person, animal and/or scenery) of 20 interest in image 30. Second image editor 70 can be any software suitable for outlining or identifying that portion of image 30 to be transferred or etched on an article. Second image editor 70 should also allow a user to add text as desired such that the text is incorporated into image 30 etched on an article. For 25 example, Corel Draw™ is a software program that can be used to accomplishing these and other tasks. It is noted that other

currently available software programs may also be used and are within the scope of the present invention.

Referring to Figs. 2 and 3, having described some of the preferred characteristics of the illustrative embodiment, the 5 process or method for transferring a photo image to a medium, preferably includes at least the following steps. First converting a photo image 30, such as that shown in Fig 3, into an electronic format via first converter 40. The next step is to edit the photo image as needed using first image editor 50.

10 After the photo image has been edited as desired, the photo image can then be converted, via second converter 60 into a format compatible with computer aided laser system 20. Following the appropriate formatting of the photo image, the photo image can then be modified, via second image editor 70, to produce a 15 desired appearance or effect in an article, such as a wood picture frame 35 as shown in Fig. 3. Finally, the photo image can be carved or etched into an article via computer aided laser system 20. Preferably, at least in the case of picture frame 35, the photo image is etched on a protruding portion 37 of the 20 frame. Preferably, protruding portion 37 overlaps at least a portion of a picture display area 39. Thus, the process of the present invention enhances the personal appeal and overall allure of an article.

The present invention having been thus described with 25 particular reference to the preferred forms thereof, it will be obvious that various changes and modifications may be made

therein without departing from the spirit and scope of the present invention as defined herein.